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RAW SEQUENCE LISTING DATE: 12/11/2002 PATENT APPLICATION: US/10/009,500A TIME: 09:28:55

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1 <110> APPLICANT: KORDOWICZ, MARIA
        GUESSOW, DETLET
 3
         HOFMANN, UWE
        PACUSZKA, TADEUSZ
 4
        GARDAS, ANDRZEJ
 5 '
 6 <120> TITLE OF INVENTION: HYALURONIDASE FROM THE HIRUDINARIA MANILLENSIS,
         ISOLATION, PURIFICATION AND RECOMBINANT METHOD OF
        PRODUCTION
 9 <130> FILE REFERENCE: MERCK 2332
10 <140> CURRENT APPLICATION NUMBER: US/10/009,500A
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/009,500A

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RAW SEQUENCE LISTING

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RAW SEQUENCE LISTING DATE: 12/11/2002 PATENT APPLICATION: US/10/009,500A TIME: 09:28:55

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102	пси	50		OLy	пси	501	55	_	1 1 1	1110		60	_	Oly	1111	1110	
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104	-			_			-	_	_	-				Trp	_	_	240
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106			act	+++	222			200					- 202	ata	202		288
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107	тут	115	Ala	rne	85 85	Ash	туз) IIII	FIC	90		Ата	1111	. 110	95	_	
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RAW SEQUENCE LISTING DATE: 12/11/2002 PATENT APPLICATION: US/10/009,500A TIME: 09:28:55

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	ser	GLY	ser		ьеu	GIY	vaı	Ата		ASP	Ата	ser	ьeu		ser	PIO
197	T	C1	T	20	0	DI	*7 - 1	70	25	m1	0	D	T	30	DI.	Ŧ
198	ьys	ста		Trp	Ser	Pne	vaı	_	Ile	Thr	Ser	Pro		Leu	Pne	гàг
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221 222 223 224 225 226 227 228 229 230 231 232	Lys 225 His Asp Asp Glu	210 Gly Gln Ala Val Thr 290	Leu Tyr Thr Leu 275 Ser	Ala Tyr Tyr 260 Lys Ser	Asp Phe 245 Phe Asp Gly	Glu 230 Asp Lys Ser Tyr	215 Ala Gly Lys Pro Asn 295	Val Gly Asn Leu His 280 Ser	Asp Thr Gln 265 Lys	His Ser 250 Gln Asp	Val 235 Asp Leu Glu Glu Leu	220 Thr Val Phe Pro Asp 300	Val Ala Ser Asp Leu 285 Val	Phe Ile Lys 270 Trp	Thr Tyr 255 Val Leu Asp	Leu 240 Leu Lys Gly Arg
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221 222 223 224 225 226 227 228 229 230 231 232 233 234	Lys 225 His Asp Asp Glu Tyr 305	210 Gly Gln Ala Val Thr 290 Val	Leu Tyr Thr Leu 275 Ser Ser	Ala Tyr Tyr 260 Lys Ser Gly	Asp Phe 245 Phe Asp Gly Phe Val	Glu 230 Asp Lys Ser Tyr Leu 310	215 Ala Gly Lys Pro Asn 295 Thr	Val Gly Asn Leu His 280 Ser Leu	Asp Thr Gln 265 Lys	His Ser 250 Gln Asp Thr Lys	Val 235 Asp Leu Glu Glu Leu 315	220 Thr Val Phe Pro Asp 300 Gly	Val Ala Ser Asp Leu 285 Val Leu	Phe Ile Lys 270 Trp Ser Ser	Thr Tyr 255 Val Leu Asp Ala Tyr	Leu 240 Leu Lys Gly Arg Ala 320
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235	Lys 225 His Asp Asp Glu Tyr 305 Asn	210 Gly Gln Ala Val Thr 290 Val Asn	Leu Leu Tyr Thr Leu 275 Ser Ser Val	Ala Tyr Tyr 260 Lys Ser Gly Lys	Asp Phe 245 Phe Asp Gly Phe Val 325	Glu 230 Asp Lys Ser Tyr Leu 310 Val	215 Ala Gly Lys Pro Asn 295 Thr	Val Gly Asn Leu His 280 Ser Leu Arg	Asp Thr Gln 265 Lys Gly Asp	His Ser 250 Gln Asp Thr Lys Thr 330	Val 235 Asp Leu Glu Glu Leu 315 Ile	220 Thr Val Phe Pro Asp 300 Gly	Val Ala Ser Asp Leu 285 Val Leu Asn	Phe Ile Lys 270 Trp Ser Ser Gly	Thr Tyr 255 Val Leu Asp Ala Tyr 335	Leu 240 Leu Lys Gly Arg Ala 320 Tyr
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236	Lys 225 His Asp Asp Glu Tyr 305 Asn	210 Gly Gln Ala Val Thr 290 Val Asn	Leu Leu Tyr Thr Leu 275 Ser Ser Val	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp	Asp Phe 245 Phe Asp Gly Phe Val 325	Glu 230 Asp Lys Ser Tyr Leu 310 Val	215 Ala Gly Lys Pro Asn 295 Thr	Val Gly Asn Leu His 280 Ser Leu Arg	Asp Thr Gln 265 Lys Gly Asp Gln Glu	His Ser 250 Gln Asp Thr Lys Thr 330	Val 235 Asp Leu Glu Glu Leu 315 Ile	220 Thr Val Phe Pro Asp 300 Gly	Val Ala Ser Asp Leu 285 Val Leu Asn	Phe Ile Lys 270 Trp Ser Ser Gly	Thr Tyr 255 Val Leu Asp Ala Tyr 335	Leu 240 Leu Lys Gly Arg Ala 320 Tyr
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237	Lys 225 His Asp Asp Glu Tyr 305 Asn	210 Gly Gln Ala Val Thr 290 Val Asn Leu	Leu Tyr Thr Leu 275 Ser Val Leu	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp 340	Asp Phe 245 Phe Asp Gly Phe Val 325 Lys	Glu 230 Asp Lys Ser Tyr Leu 310 Val	215 Ala Gly Lys Pro Asn 295 Thr Ile	Val Gly Asn Leu His 280 Ser Leu Arg	Asp Thr Gln 265 Lys Gly Asp Gln Glu 345	His Ser 250 Gln Asp Thr Lys Thr 330 Pro	Val 235 Asp Leu Glu Glu Leu 315 Ile Asn	220 Thr Val Phe Pro Asp 300 Gly Tyr	Val Ala Ser Asp Leu 285 Val Leu Asn Asp	Phe Ile Lys 270 Trp Ser Ser Gly Tyr 350	Thr Tyr 255 Val Leu Asp Ala Tyr 335 Trp	Leu 240 Leu Lys Gly Arg Ala 320 Tyr
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238	Lys 225 His Asp Asp Glu Tyr 305 Asn	210 Gly Gln Ala Val Thr 290 Val Asn Leu	Leu Leu Tyr Thr Leu 275 Ser Val Leu Val	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp 340	Asp Phe 245 Phe Asp Gly Phe Val 325 Lys	Glu 230 Asp Lys Ser Tyr Leu 310 Val	215 Ala Gly Lys Pro Asn 295 Thr Ile	Val Gly Asn Leu His 280 Ser Leu Arg Leu Val	Asp Thr Gln 265 Lys Gly Asp Gln Glu	His Ser 250 Gln Asp Thr Lys Thr 330 Pro	Val 235 Asp Leu Glu Glu Leu 315 Ile Asn	220 Thr Val Phe Pro Asp 300 Gly Tyr	Val Ala Ser Asp Leu 285 Val Leu Asn Asp	Phe Ile Lys 270 Trp Ser Ser Gly Tyr 350	Thr Tyr 255 Val Leu Asp Ala Tyr 335 Trp	Leu 240 Leu Lys Gly Arg Ala 320 Tyr
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239	Lys 225 His Asp Asp Glu Tyr 305 Asn Gly Met	210 Gly Gln Ala Val Thr 290 Val Asn Leu His	Leu Leu Tyr Thr Leu 275 Ser Val Leu Val 355	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp 340 His	Asp Phe 245 Phe Asp Gly Phe Val 325 Lys	Glu 230 Asp Lys Ser Tyr Leu 310 Val Asn Ser	215 Ala Gly Lys Pro Asn 295 Thr Ile Thr	Val Gly Asn Leu His 280 Ser Leu Arg Leu Val 360	Asp Thr Gln 265 Lys Gly Asp Gln Glu 345 Gly	His Ser 250 Gln Asp Thr Lys Thr 330 Pro	Val 235 Asp Leu Glu Glu Leu 315 Ile Asn	220 Thr Val Phe Pro Asp 300 Gly Tyr Pro Val	Val Ala Ser Asp Leu 285 Val Leu Asn Asp Phe 365	Phe Ile Lys 270 Trp Ser Gly Tyr 350 Lys	Thr Tyr 255 Val Leu Asp Ala Tyr 335 Trp Val	Leu 240 Leu Lys Gly Arg Ala 320 Tyr Leu Asp
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240	Lys 225 His Asp Asp Glu Tyr 305 Asn Gly Met	210 Gly Gln Ala Val Thr 290 Val Asn Leu His Ser	Leu Leu Tyr Thr Leu 275 Ser Val Leu Val 355	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp 340 His	Asp Phe 245 Phe Asp Gly Phe Val 325 Lys	Glu 230 Asp Lys Ser Tyr Leu 310 Val Asn Ser	215 Ala Gly Lys Pro Asn 295 Thr Ile Thr Leu	Val Gly Asn Leu His 280 Ser Leu Arg Leu Val 360	Asp Thr Gln 265 Lys Gly Asp Gln Glu 345	His Ser 250 Gln Asp Thr Lys Thr 330 Pro	Val 235 Asp Leu Glu Glu Leu 315 Ile Asn	220 Thr Val Phe Pro Asp 300 Gly Tyr Pro Val	Val Ala Ser Asp Leu 285 Val Leu Asn Asp Phe 365	Phe Ile Lys 270 Trp Ser Gly Tyr 350 Lys	Thr Tyr 255 Val Leu Asp Ala Tyr 335 Trp Val	Leu 240 Leu Lys Gly Arg Ala 320 Tyr Leu Asp
221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239	Lys 225 His Asp Glu Tyr 305 Asn Gly Met	210 Gly Gln Ala Val Thr 290 Val Asn Leu His Ser 370	Leu Tyr Thr Leu 275 Ser Val Leu Val 355 Asp	Ala Tyr Tyr 260 Lys Ser Gly Lys Asp 340 His	Asp Phe 245 Phe Asp Gly Phe Val 325 Lys Asn	Glu 230 Asp Lys Ser Tyr Leu 310 Val Asn Ser Asn	215 Ala Gly Lys Pro Asn 295 Thr Ile Thr Leu Lys 375	Val Gly Asn Leu His 280 Ser Leu Arg Leu Val 360 Ala	Asp Thr Gln 265 Lys Gly Asp Gln Glu 345 Gly	His Ser 250 Gln Asp Thr Lys Thr 330 Pro Asn	Val 235 Asp Leu Glu Glu Leu 315 Ile Asn Thr	220 Thr Val Phe Pro Asp 300 Gly Tyr Pro Val Ala 380	Val Ala Ser Asp Leu 285 Val Leu Asn Asp Phe 365 Gln	Phe Ile Lys 270 Trp Ser Ser Gly Tyr 350 Lys Cys	Thr Tyr 255 Val Leu Asp Ala Tyr 335 Trp Val Thr	Leu 240 Leu Lys Gly Arg Ala 320 Tyr Leu Asp

VERIFICATION SUMMARY

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